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Agency of Human Services

Department for Children and Families OFFICE OF ECONOMIC OPPORTUNITY

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MIL SEP 20 A 9: 43

To:

Deena Frankel, Department of Public Service

From:

Jules Junker, Weatherization Programs Coordinator

Subject:

Weatherization Program Questions

Date:

September 18, 2006

Deena,

Please see the answers to your questions below. Let me know if I can be of further assistance.

How many Vermont households are eligible for Weatherization?

Using the Census 2000 figures, there are 67,284 households in Vermont at or below 60% of state median income (Weatherization Program eligibility level). After deducting households weatherized since 1991 (18,864) you have approximately 48,420 households eligible for Weatherization.

What percentage of eligible households cumulatively have been served by Weatherization?

Approximately 39%

How big is the Weatherization Trust Fund at this time?

Due to withdrawals by the Office of Finance and Management the Weatherization Trust Fund is currently running a deficit balance when all grant obligations are included

How much of the Weatherization Trust Fund comes from electric customers in a typical year?

Approximately 50%

Is the Weatherization Evaluation available online?

Yes, go to www.ahs.state.vt.us/oeo/weather.htm, also enclosed is a copy of the last Weatherization Works reports.

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Weatherization Works

The Annual Report of Vermont's Weatherization Program



State of Vermont
Office of Economic Opportunity
103 S. Main Street
Waterbury, VT 05671-1801
(802) 241-2450



Weatherization Works

The Annual Report of Vermont's Weatherization Program

"Our home is already warmer on these cool nights."
—Elmore



State of Vermont Office of Economic Opportunity 103 S. Main Street Waterbury, VT 05671-1801 (802) 241-2450

February 1997



State of Vermont

AGENCY OF HUMAN SERVICES

OFFICE OF ECONOMIC OPPORTUNITY 103 South Main Street Waterbury, Vermont 05671-1801

> Telephone: (802) 241-2450 Fax: (802) 241-2325

> > February, 1997

Welcome to "Weatherization Works," an overview of Vermont's Weatherization Assistance Program. Outlined in the following pages is a summary of the program's achievements over the past year, and goals for the year ahead.

What's missing from this report, and indeed is virtually impossible to convey in any written narrative, is the immense impact that Weatherization has on people's daily lives. Behind every BTU saved is a warmer family. Behind every dollar saved in energy efficiency is a household less constricted by high energy costs, and better able to meet nutritional and medical needs. And behind every cost/benefit analysis is an entire realm of other "intangible" benefits including the ability of many elderly Vermonters to remain safe and healthy in their own homes.

What's also missing from this report is the amount of dedication and attention to quality imbedded within Vermont's five regional Weatherization programs. Vermont's efforts have long been, and continue to be, recognized as leading the way towards increased efficiency and effectiveness in terms of program design and implementation.

In a time of continued skepticism of public programs, Vermont's Weatherization Assistance Program proves that federal/state/community partnerships CAN work, and that such efforts CAN achieve measurable and long-lasting results.

David Tucker

Director,

Office of Economic Opportunity

Jules Junker

Weatherization Programs Coordinator

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Cover Photo: On this frigid -24° F morning, the crew prepares to insulate the attic of this 1-1/2 story uninsulated home in Montgomery, Vermont. The unheated attic was at 60° F even with an outside temperature of -24° F.

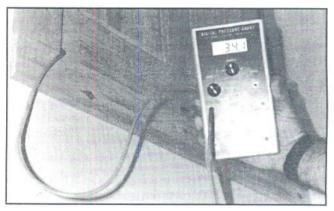
HIGH SKILLS + HIGH TECH = HIGH ENERGY SAVINGS



Earl Niles from SEVCA uses a blower door and infrared camera to pinpoint insulation voids and hidden air leakage problems. The blower door will also help to estimate the air infiltration rate of the home.



Tom Donahue from CVCAC is using a "pressure pan" and pressure gauge to diagnose problems with the heating system ductwork.



Digital pressure gauges are used to measure pressure differences between different parts of a house. They help to pinpoint hidden air leakage pathways inside walls and ceilings as well as help to ensure a heating system will not "backdraft" combustion gases into the home.



On a frosty -25°F morning, Tim Page from CVOEO installs blown fiberglass in the ceiling of this mobile home. This will eliminate the condensation and ice dam problems as well as save energy.



After installing a housewrap skin on the exterior framing a skilled technician tubes high density cellulose into a drafty kneewall corner.



A carbon monoxide (CO) detector is used by John Colby from NETO who just found high CO levels (660 ppm) in this gas kitchen range. These detectors are used for health and safety reasons because CO is colorless, odorless and deadly.

Vermont Weatherization Assistance

Vermont Weatherization Program Mission:

To reduce the energy costs for low-income families, particularly for the elderly, people with disabilities, and children, by improving the energy efficiency and comfort of their homes while ensuring their health and safety.

"My personal opinion of this program is that if it wasn't around or if funding stopped there would be a lot more fuel being used and a lot more electricity being used (wasted) because of insufficient heating systems."

— Colchester

Program Overview

The average (residential energy) burden for all low-income households averaged 14.4% (of total income) in 1990. This is more than four times the burden for non-poor U.S. households which averaged 3.5%."

The Weatherization Assistance Program is administered by the Office of Economic Opportunity at the state level. Local services are delivered by five regional "subgrantees". They are:

- Bennington Rutland Opportunity Council Inc.
 (BROC) serving Bennington and Rutland counties
- Central Vermont Community Action Council Inc. (CVCAC) serving Lamoille, Orange and Washington counties
- Champlain Valley Office of Economic Opportunity Inc., (CVOEO) serving Addison, Chittenden, Franklin, and Grand Isle counties
- Northeast Employment and Training Organization Inc. (NETO) serving Caledonia, Essex, and Orleans counties
- South Eastern Vermont Community Action Inc. (SEVCA) serving Windham and Windsor counties.

A total of twelve field offices serve the fourteen counties in the state.

The Weatherization Assistance Program provides energy conservation services to households at or below 150% of the Federal poverty income guidelines. Priority is given to households where

elderly people, handicapped persons or children age five or younger live. The next level of priority is for all other households at or below 125% of the federal poverty guidelines.

To receive weatherization, a low income person applies for services with a local weatherization provider.

When a family has reached the top of the waiting list at their local weatherization office, an energy audit is scheduled. Prior to actually conducting the energy audit, the energy

auditor analyzes energy consumption information about the home to determine the home's energy efficiency index (BTU\Sq Ft\Heating Degree Day) which is similar to a car's miles per gallon rating. This allows a comparison to be made with other homes in that service area and provides the auditor an indication about the potential to save energy in the home. Each energy audit entails a detailed customer interview to determine how the customer uses the home - i.e.- are parts

"The insulation and caulking has tightened a very old & drafty home."

— Wells River

of the home "closed off" during winter or are unaccounted sources of heat being used.

With health and safety of the client a top priority of the Weatherization Program, energy auditors are trained and equipped to

perform a barrage of health and safety tests during the audit to ensure all combustion appliances are operating safely prior to tightening a home. Unsafe chimneys and wiring, heating systems with cracked heat exchangers, carbon monoxide and combustion air issues are typical problems the program deals with on a daily basis.

After reviewing the mechanical systems, the energy auditor conducts an assessment of the thermal "envelope" or shell of the house. A blower door test is performed to quantify the air leakage rate of the building and to determine safe limits for tightening the home. An infra-red scan is done to find areas that may be devoid of insulation. The infrared camera in combination with a blower door allows the auditor to "see" and pinpoint inconspicuous air leakage problems. Finally, careful measurements are made to determine the R-values and surface areas of the different building components. With this information, careful detailed workscopes are developed to save the maximum amount of energy possible within the investment parameters of the program while ensuring the health and safety of the customers.



Major air leakage problems and lack of slope and atticinsulation (note ice dams) in this 1,500 sq. ft. southern

Vermont home, contributed to the high energy use of 1,300 gallons of fuel oil prior to weatherization. Post weatherization fuel consumption is estimated to be 845 gallons.

Depending on which local office is providing the services, the job may be done with in-house crews or subcontracted out. A portion of almost every job is subcontracted to professional tradespeople such as heating contractors. However, the bulk of airsealing and insulation work is performed by trained in-house weatherization crews. Typical workscopes involve some health and safety work, heating and distribution system efficiency improvements, air sealing (draft reduction), and insulation work. Once the project is complete, a final quality control, health and safety "test out" inspection is performed by the local agency. The Office of Economic

Opportunity Weatherization Technician monitors 10% of all completed jobs statewide to double check the local quality control on completed units.

"Best contractor I've ever had work in my house."

— Burlington

Progress Report 1996 - 1997 Program Year Weatherization Assistance Program

Statewide, weatherization expenditures for the 1996-1997 program year will be approximately 3.6 million dollars. This is a 9% reduction from the previous year's expenditures of 4.1 million dollars. These expenditures are comprised of \$646,763 United States Department of Energy funds, a 53% reduction from the previous year, and \$2.9 million from the Vermont Weatherization Trust Fund.

Vermont Weatherization Program
1996 Program Year - 3000 People Served

Elderly 36.7% 1100

Handicapped 14.0% 420

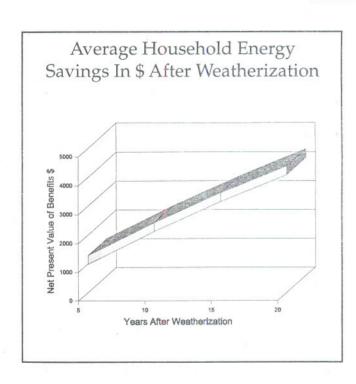
Others 22.7% 680

Federal funds currently account for about 17% of the program's total revenues.

During the 1996-1997 program year, approximately 1,008 homes will receive weatherization services. Approximately 67% or 687 of these homes will be privately owned single family homes. Rental units will account for roughly 308 homes or about 30% of the program's total production. Weatherization assistance to not-for-profit shelters will account for approximately 3% of the program's production.

Elderly persons reside in 308 of the homes being served this year or about 30% of the total units. Children under the age of five reside in 35%, or approximately 359 units of the homes receiving weatherization. About 215 of the units being served this year (21%) have handicapped persons living in the home. In total, weatherization will

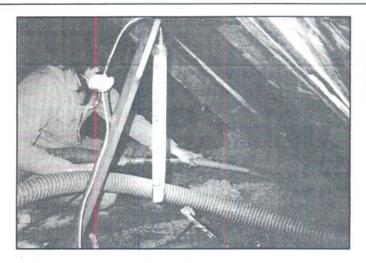
serve approximately 3000 Vermonters. Eleven hundred elderly persons, 420 handicapped persons and 800 children will be served by the program this year. Every single home served by the program will be warmer, healthier, safer, and more energy efficient as a result of weatherization activities



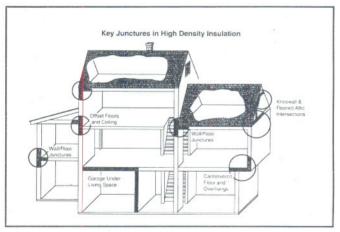
Vermont Weatherization Program Goals for 1997-1998

- Increase the average space heating % savings above the 1993-1994 level of 20.1%. For a family that uses 800 gallons of fuel oil this translates to a savings of more than 161 gallons per year.
- Raise the average space heating MMBtu savings above the 1993-1994 value of 24.5. This represents an average savings above 176 gallons of #2 fuel oil per year.
- Increase the average Net Present Value of energy savings above the 1993-1994 value of \$4,234.
- Raise the program's benefit-to-cost ratio above the 1993-1994 level of 1.8 to 1.
- Incorporate KWH savings into the next program impact evaluation.
- Develop a methodology to quantify the program's health & safety benefit-to-cost ratio.
- · Increase the amount of funds leveraged.
- Streamline links with the Fuel Assistance Program.

TYPICAL WEATHERIZATION RETROFITS



The sloped ceilings on this 1-1/2 story cape home are dense packed with cellulose insulation from the attic. This will eliminate the ice dams and reduce a major heat loss problem.



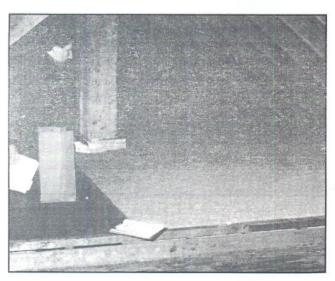
This graphic details specific areas where dense pack cellulose can be used to effectively reduce air infiltration in homes.



Tim Page from CVOEO seals penetrations in the attic floor prior to installing attic insulation. The penetrations or bypasses, were exhausting heated air into the unintentionally heated attic which was at 60° F on this frigid -24° F morning.



A skilled technician from SEVCA install high density cellulose in the sidewalls from the attic. This technique is less labor intensive, requiring no ladders or pre-drilling of sidewalls.



Jeff Gallant from BROC inspects the attic insulation that was installed in this home. Comprehensive quality control inspections are done on 100% of the completed jobs and double checked by the OEO Weatherization Technician on 10% of the jobs.

Other Services Performed by the Vermont Weatherization Program

Emergency Heating System Replacement Program

In conjunction with the Department of Social Welfare (DSW) and Vermont's 5 Community Action Agencies, (CAA) approximately 120 emergency heating system replacements will made in owner occupied low-income homes this heating season. Eligible families with a heating system emergency are identified by the CAA Fuel Crisis staff and a referral is made to the local weatherization provider. The local weatherization agency sends a trained energy auditor to the home to assess the problem. Immediately following this inspection, an approved heating contractor is dispatched to the home to replace or repair the dysfunctional or dangerous system. After the heating

system is replaced, the energy auditor returns to the home to inspect the replaced system, thereby providing quality assurance for the program. The home is then placed on a

waiting list to receive weatherization services.

"I honestly believe the energy auditor saved my life... Having a warm house is a godsend. Everyone I came in contact with seemed to be concerned for my welfare."

- Jericho

Demand Side Management Services (DSM)

OEO currently operates fourteen demand side management programs for electric utilities throughout the state. These services are piggybacked with the regular weatherization program. Every home weatherized in these

utilities' service areas receives these DSM services. Typical electrical DSM measures include energy efficient lighting, domestic hot water efficiency measures and consumer education.

OEO also has an agreement with Vermont Gas Systems to do gas DSM work. This work is done by the Champlain Valley Office of Economic Opportunity (CVOEO) weatherization program. Typical measures included under this agreement involve thermal improvements normally addressed by weatherization. The cost savings to CVOEO's weatherization program will enable them to

weatherize an additional nine units this program year. The costs for all DSM piggyback services are paid by the local utility company directly to the local weatherization

subgrantee.

"My house is nice and warm, and it seems good not to cover up all the time and wear warm clothing."

Colchester

Emergency Inspection Services, Carbon Monoxide Detection

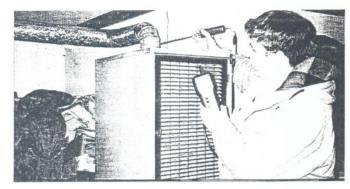
The weatherization "network" is the best trained building diagnostic unit in the state for energy related problems. In conjunction with the VT Department of Labor and Industry, OEO has made the subgrantee "network" available for field measurements of suspected carbon monoxide problems. During inclement weather, especially in a prolonged cold snap, the demand for testing, coupled with hazardous and difficult driving conditions makes it both difficult and dangerous for Labor and Industry's staff to respond promptly. The weatherization network has equipment and trained personnel located all around the state. As a result, OEO's Weatherization Staff Technician and local subgrantee staff members perform these tests

upon request by the Department of Labor and Industry and local fire marshals. Carbon monoxide detectors and other diagnostic equipment such as combustible gas detectors and digital manometers are routinely used by weatherization program staff

during these inspections.

Training and Technical Assistance

For the past several years, the OEO has invited/included utility staff at all weatherization program trainings. OEO was able to provide affordable training sessions on a variety of technical issues to weatherization personnel, representatives from other state agencies, utility personnel and private heating contractors. These cross-training sessions build relationships between the energy service professionals in the state and facilitate technology transfer to private industry.



Health and safety tests for carbon monoxide (CO) are performed on **every** heating system, gas range and gas water heater. This improper installation was backdrafting CO into the home.

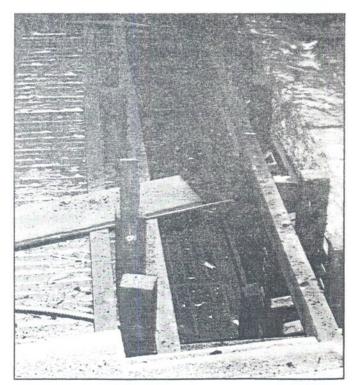
Weatherization Program Background and History

in Vermont since the late 1970's. Starting in 1980, the United States Department of Energy (DOE) has been a constant funding source for the program. Funding from the DOE has been subject to large swings and has steadily declined over time. All through the 1980's, a variety of federal resources were used to supplement the DOE weatherization program in Vermont. Maintaining experienced trained staffs and up to date equipment was difficult because of this erratic funding.

Through most of the 1980's, Low Income Home Energy Assistance Program (LIHEAP) funds were used to keep the program functioning. In the late 1980's Petroleum Violation Escrow Funds (PVE) replaced the dwindling LIHEAP dollars. The Vermont General Assembly, recognizing that these were stop-gap measures, passed Act 272 in 1990. This established a Weatherization Trust Fund, an enhanced weatherization program, and a 0.5% fuel gross receipts tax as a funding mechanism, thereby providing stable funding and giving the program the capability to exceed the restrictions of the current federal DOE program. Since the inception of the Weatherization Trust Fund, many of the federal rules governing the DOE's program have come to resemble the rules the Vermont Weatherization Trust Fund operates under. The two most notable changes recently have been an allowance to direct additional dollars to units requiring capital intensive work, and an allowance to install smoke detectors in weatherization units. Clearly, the Vermont

"I'd recommend their work to anyone. They're really professionals."

- Sheffield



The dropped closet ceiling in this attic, with open top balloon frame wall partitions, can cause more air leakage than all the windows combined. Air sealing attic bypasses is an essential step prior to the addition of insulation.

Weatherization Trust Fund has influenced national policies regarding the rules governing the Weatherization Assistance Program nationwide.

Program Evaluation

"What they did for me in a week would have taken me years to do as a single working mom"

- Swanton

Vermont's Weatherization Assistance Program has a strong history of program evaluation. Two recent evaluations have been conducted by the Vermont Energy Investment Corporation. The first published in 1994 found that the program had a 1.33 to 1 benefit cost ratio, or \$1.33 in energy savings for every dollar spent using extremely conservative methodology.

In 1995, the Office of Economic Opportunity again commissioned a similar evaluation that found dramatic improvements since the first evaluation. The following is an excerpt from the Executive Summary of "Impact Evaluation of the 1993-1994 Vermont Weatherization Assistance Program," prepared by Vermont Energy Investment Corporation. (Copies of the full evaluation are available from OEO.)

Evaluation Category	'92-'93	′93-′94	Change
Total Households Served in Analysis Period	1,177	1,626	+ 449
Average Space Heating MMBtu Savings	18.5	24.5	+ 6.0
Average Space Heating % Savings	18.3%	20.1%	+ 10%
Average Cost of Energy-Efficiency Measures Per Household in December 1993 Dollars	\$2,394	\$2,392	-\$ 2
Average Value* of Quantified Energy Benefits Per Household in December 1993 Dollars	\$3,189	\$4,232	+\$1,043
Projected Net Benefit-to-Cost Ratio	1.3 to 1	1.8 to 1	+ 33%

^{*} Expressed as a "net present value", a measurement of the value of future dollars in today's currency.

1995 Impact Evaluation of the 1993-94 Vermont Weatherization Assistance Program
Prepared by The Vermont Energy Investment Corporation

"The Vermont Weatherization Assistance Program (WAP) is a program dedicated to reducing the energy burden of eligible lowincome households in Vermont. The program is helping to deliver

safer and more affordable housing to low-income Vermonters by increasing the energy efficiency of their homes. For the 55 buildings (66 housing units) analyzed in this evaluation, the program was found to be highly cost-effective and successful at meeting its goal. Based on an analysis of actual costs and energy bills for these 1993-1994 program participants, the average program expenditure of \$2,392 per household for energy efficiency measures resulted in an average 20.1% energy savings, with a present value of \$4,232. This represents an excellent benefit-to-cost ratio of 1.8 to 1 for the program investment.

"My cellar was full of holes and one could feel a breeze in the home when wind was blowing outside. Now, my cellar is tight and smoke rises when I light a match instead of blowing away."

- Barre

"It also should be noted that this estimate of program costeffectiveness is conservative since it includes neither all energy savings produced by the program (it was not possible to estimate the full magnitude of the electrical-energy savings produced) nor the environmental benefits associated with burning less fuel. In addition, this evaluation has not attempted to quantify the clearly important health and safety benefits which result from the energy-efficiency improvements. Chief among these latter benefits is the program capacity to identify, and to rectify, conditions which can produce hazardous, and sometimes lethal, levels of carbon monoxide within the living spaces.

"Two years ago, the Executive Summary of the 1992-1993 impact evaluation noted that the work evaluated by that report pre-dated a number of important program changes "which can be expected to have improved the technical capabilities of subgrantee staffs, increased their consistency, and generally improved program cost-effectiveness." The evidence provided by the work evaluated for the current impact evaluation substantiates this prediction. Indeed, as the following table shows, the results of this evaluation suggest that the 1993-1994 program produced about one-third more energy savings per job than the 1992-1993 program at essentially the same cost per job. As a result, the

program benefit-to-cost ratio improved from an already laudable 1.3 to 1 ratio, to an even more impressive 1.8 to 1 ratio of benefits provided to costs incurred.

"In summary, the Vermont Weatherization Assistance Program, which has in the past been an excellent program, is getting better as time goes on and new practices and technologies emerge and are refined. The program is helping to deliver safer and more affordable housing to low-income Vermonters by increasing the energy efficiency of their homes. Given the major programmatic improvements of the recent past, the program appears well-poised to continue to lead the region, if not the country, in innovative and comprehensive techniques for cost-effectively reducing the energy burden of those least able to bear them."

What Is New In Weatherization?

Building Performance Institute Employee Certification Program

'nderstanding that funding resources can be maximized by trained professional staff, the Office of Economic Opportunity has recently embarked on a collaborative project to certify the skills of all field staff that work in the Vermont Weatherization Program. The professional skills certification Project is funded by the United State Department of Energy, New York State Energy Research Development Authority, New york Department of State, and the Vermont Office of Economic Opportunity.

"They did more than I expected. Before my trailer was weatherized I often arose in the morning to find the temp. at between 30 & 40°. Since weatherization, it never gets below 60°. It has made my life much pleasanter!"

-Orleans





This crewperson is installing high density cellulose into this unusual soffit detail to seal air leaks into the main part of the house.

A primary goal of the sponsoring organizations is to build an infrastructure where a third-party, industry-based effort will certify workers within the building performance industry. The project is creating a certification and assessment process by identifying the best practices and standards for worker performance in this industry and assessing competency in those skills required to deliver top performance. As the project evolves, the program will be opened to private industry with the intent that this process will eventually become the certification and assessment process for all those working in the residential energy efficiency industry.

Residential Energy Efficiency Partnership

The Office of Economic Opportunity in partnership with the Vermont Department of Public Service and with the support of the Vermont Housing Finance Agency and a number of utilities is developing a program to consolidate and coordinate energy efficiency services delivered to multi-family, low-income housing in Vermont. The project will create within the Vermont Weatherization Program the capacity to consolidate and coordinate the resources of many parties who have historically acted independently of one another to weatherize rental properties.

The partnership will provide a streamlined process to determine the energy efficiency measures that can cost-effectively be delivered, arrange for financing and grants to pay for those measures, insure the proper implementation of the identified measures, and monitor the measures once installed—all in the most efficient manner possible.

Home Energy Efficiency Ratings

Termont will train a number of Weatherization energy auditors to perform home energy ratings for Energy Rated Homes of Vermont. This project will broaden the expertise and services

that the Vermont Weatherization Program has to offer as well as build important cross training relationships that will keep the program "at the top of the class".

"Everyone kept busy all the time, they are all very good workers. My home is a lot warmer now, and don't have to run my furnace so high now, it sure seems good, I'm sure I will be saving on fuel from now on."

— Underhill

Weatherization Loan Fund

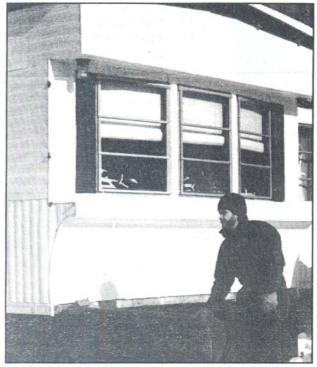
The OEO is currently operating a revolving loan fund to facilitate property owner contributions for weatherizing rental units. The fund will anchor an aggressive leveraging approach which requires the local weatherization providers to solicit rental property owners for in-kind support and direct cash investments to offset

weatherization's total investment in their units.

Local weatherization agencies continue to seek support from rental property owners when working on their properties. In most cases the owner must fully fund heating system replacements and other health and safety related expenses prior to receiving weatherization. Many rental units have the property owner contributing self-help labor on the parts of the job where technical expertise is not required. During the last program year approximately \$170,000 was received from rental property owners.

Mobile Home Rescue Project

This past summer one of the local weatherization providers, Champlain Valley Weatherization Service (CVWS), received a donated mobile home. Realizing the potential for a training site, OEO worked with CVWS who took possession of the mobile home in the summer of 1996. OEO then organized "The Mobile Home Training Workshop" which included sessions on energy audit techniques, health and safety issues, advanced installation retrofits and cost-effective measures specific to mobile homes for weatherization personnel statewide. The combination of training and regular weatherization funds along with additional leveraged resources will allow this mobile home to be weatherized, rehabilitated and turned into affordable housing for a low-income family.



Jeff Hall from NETO installs blown fiberglass insulation in the floor or "belly" of this mobile home. This is an extremely effective measure which reduces air infiltration and insulates the heating system ductwork and the floor system all in one step.

One Weatherization Success Story

During a routine energy audit at an elderly couple's home, the weatherization auditor found extremely high and dangerous levels of carbon monoxide (over 1,600 PPM) being emitted from the gas cooking range (OSHA recommends no more than 9 PPM in an eight hour day). The auditor then asked the couple if they ever used the gas

range for space heating. They answered, "Well, when the power goes out, and it goes out a lot up here, we hang a blanket over the kitchen door and stay in the kitchen to keep warm." After further questions the auditor found that the couple had experienced many of the symptoms of carbon monoxide poisoning which correlated with the power outages. A propane service technician was immediately dispatched to the home to replace a defective gas valve which eliminated the excessive carbon monoxide problem. This is just one example of a scenario that is repeated over the course of a year. As a result of weatherization, not only is this elderly couple's home much easier to heat but it is also much safer.

"Even though we are nearing the end of the Winter season, it has been cold enough so that we have been able to feel a distinctly noticable difference. The house holds the heat in more and it just seems' 'tighter'."

- Perkinsville

WEATHERIZATION EXPENDITURES BY FUNDING SOURCE VERMONT OFFICE OF ECONOMIC OPPORTUNITY

YEAR	DOE	CETA	LIHEAP	PVE	WTF	TOTAL	# OF UNITS	
1980	1,990,000	1,000,000	0,000,000	0,000,000	0,000,000	2,990,000	1803	
1981	1,830,000	0	750,000	00	0	2,580,000	2572	
1982	1,010,000	0	1,500,000	0	0	2,510,000	1795	
1983	1,810,000	0	1,600,000	0	0	3,410,000	2131	
1984	1,420,000	0	1,660,000	0	0	3,080,000	2677	
1985	1,444,405	0	1,840,000	228,000	0	3,512,405	2595	
1986	1,239,986	0	1,610,000	0	0	2,849,986	1850	
1987	1,272,093	0	1,240,000	500,000	0	3,012,093	1699	
1988	1,094,042	0	620,122	1,100,000	0	2,814,164	1587	
1989	1,141,812	0	0	1,508,000	0	2,649,812	1392	
1990	1,165,112	0	0	408,000	1,319,363	2,892,475	706(DOE 419 (WTF)	
1991	1,314,950	0	0	0	2,619,985	3,934,935	654 (DOE) 786 (WTF)	
1992	1,300,306	0	0	0	2,692,976	3,993,282	580 (DOE) 800 (WTF)	
1993	1,297,000	0	0	0	2,715,750	4,012,750	528 (DOE) 895 (WTF)	
1994	1,317,000	0	0	0	3,257,494*	4,574,494	1173	
1995	1,220,237	0	0	0	2,925,458	4,145,695	1211	
1996	646,763	0	0	0	2,983,289	3,630,052	1008	
1997	680,763	0	0	0	3,325,000	3,915,763	1207	

* includes one-time start-up of rental revolving loan program (see page 15)

DOE	U.S Department of Energy Weatherization Assistance Program
CETA	An early employment/training program
LIHEAP	Federal fuel assistance funding, allowable for weatherization
WTF	Weatherization Trust Fund
PVE	Petroleum Violation Escrow (Oil overcharge funds)

TO FIND OUT MORE ABOUT WEATHERIZATION, CONTACT THE AGENCY NEAREST YOU:

Bennington-Rutland Opportunity Council (BROC	
60 Center Street	775-0878 or
Rutland, VT 05701	800-717-BROC
Bennington	447-7515
Central Vermont Community Action Council (CV	CAC)
36 Barre-Montpelier Road	479-1053 (Voice/TDD) or
Barre, VT 05641	800-639-1053 (Voice/TDD)
Randolph	728-9506 or 800-846-9506
Morrisville	r 800-639-8710 (Voice/TDD)
Champlain Valley Office of Economic Opportunit	
P.O. Box 1603	
Burlington, VT 05402	800-287-7971 (Voice/TDD)
Champlain Valley Weatherization Service P.O. Box 1591	
Burlington, VT 5402660-3452 or	= 900 E4E 1094 (Maios /TDD)
Middlebury	
St. Albans	
51. 21touris	(voice/1DD)
Northeast Employment and Training Organization	n (NETO)
P.O. Box 186	748-8935
St. Johnsbury, VT 05819	19
Newport	334-7378
Southeastern Vermont Community Action (SEVC	A)
P.O. Box 369	
Bellows Falls, VT 05101	
Brattleboro	
Bellows Falls	` '
White River	
Springfield	885-6153